

ALBERTA LEGISLATURE LIBRARY



3 3398 00483 7463

A PROPOSAL
FOR THE ESTABLISHMENT OF
AN ALBERTA EDUCATIONAL STUDIES AND DEVELOPMENT COUNCIL

Presented to
THE GOVERNMENT OF ALBERTA
December, 1965

Alberta Advisory Committee on Educational Research

CA2 ALED 725
1965P62

Digitized by the Internet Archive
in 2025 with funding from
Legislative Assembly of Alberta - Alberta Legislature Library

PROPOSED ALBERTA EDUCATIONAL STUDIES AND DEVELOPMENT COUNCIL

Statement Concerning Procedures, Purposes and Costs

This statement has been prepared to give further information about steps necessary to establish the proposed Alberta Educational Studies and Development Council, to indicate the nature of its activities during the initial and subsequent years, and to provide an estimate of anticipated costs of its operation.

Obviously the first step is the passing of legislation required to establish the Council. A tentative draft of a proposed Act is attached hereto as Appendix A.

The second step would cover the operation of the enabling legislation during the first year. We would expect that during the first year the membership of the Board of Governors of the Council would be determined and organizational and policy meetings of the Board would be held. A first task of the Board of Governors would be the appointment of a Director as provided in the proposed Act. We would expect that the Director and a small committee of two or three specialists (not necessarily continuing members of the staff of the Council) would spend most of the first year planning the physical requirements (accommodation and equipment), the staff needs and initial program. As plans develop they must be discussed

with and approved by the Board of Governors of the Council.

During the first year the Director would visit research and development centres in other places. He and other members of the Committee would spend some time developing liaison between the Council and school systems (districts, divisions and counties) and other groups which might subsequently be involved.

The third step would cover the operation of the second and subsequent years. While it is difficult to state categorically what the detailed structure and operational procedures of the Council would be until the planning had been done, we see the following possibilities:

1. The appointment during the second year of a core staff responsible through the Director to the Board of Governors of the Council. This core staff would be composed of a number of specialists with a variety of skills and experience. We suggest, for example, the following:
 - 1.1 A specialist with research and design skills as well as an understanding of schools--their organization, functions and problems. We would expect this specialist to be a classroom oriented person capable of making critical and scientific assessments and judgments.
 - 1.2 A specialist capable of interpretation and analysis. He would be expected to work closely with teaching and

2. The appointment of supporting staff: professional, technical, administrative staffs in school systems and to involve other groups with interests in educational problems. We suggest that this person would perform a liaison function, that he would bring together in integrated fashion various problems as they became identified, would assist in the implementation of studies and eventually of developmental programs. He would in fact help to identify problems in the field, to bring them to the attention of the Council, and to translate the results of studies back to the field.

1.3 A curriculum specialist. This person would need to have research skills which could be related to studies of curriculum at various levels and in various subjects. We would expect him to be an innovator of curriculum experimentation.

1.4 A specialist in research and evaluation related to vocational education and the needs of industry. We would expect this person to keep the Council abreast of manpower needs and supply as well as to advise concerning studies related to vocational programs and their try-out and possible eventual implementation.

1.5 A specialist giving attention to architecture and equipment as these relate to the changing needs of education.

1.6 A specialist in school finance.

1.7 A specialist in adult and continuing education.

2. The appointment of supporting staff: professional, technical, and clerical. The Council will require highly trained academic persons to assist the specialists mentioned above. Each study and each developmental project will require adequate personnel. Technicians will be required for the operation and servicing of such equipment as card punches, sorters, verifiers, and computers. Adequate clerical staff will be needed for all aspects of the work of the Council.

3. The provision of accommodation and equipment for the Council.

During the first year and until the initial planning has been completed, the Council would have to be accommodated in temporary quarters. Part of the initial planning, however, should provide for a permanent building and necessary equipment. It is envisioned by the Alberta Advisory Committee on Educational Research that the proposed Council would require its own building near but not on the campus of the University of Alberta, Edmonton. The construction and equipping of a suitable building for the Council would cost between half-a-million and a million dollars.

4. Initial studies as planned by the Director and his core staff.

Illustrative of studies that might be undertaken immediately are the following:

4.1 Studies Related to Technical and Vocational Education

The impact of technological change has not, as yet been fully felt by school systems. We see evidence of its influence in the development of vocational programs in high

schools and technical institutes. The schools nonetheless are moving hesitantly but inevitably to meet the challenges of the technological age. That their pace is slow and their direction unsure results in part from inadequate planning, research, and development.

No one knows whether the direction should be towards a leisure-based society or towards one demanding greater technical competence from larger numbers of people. Whatever the long-range demands of the technological age, the immediate and pressing concerns of Canada particularly are for a more highly skilled and knowledgeable labour force. The vocational education movement seeks to allay these concerns.

Is the movement succeeding? We can not appraise its success without knowing much more about the nature of our technological society, the scope of its needs, the complex problems it is creating. At the same time we need to examine critically all that has been done to date; only through vigorous evaluation can we hope to appraise our efforts in vocationalism. Further, only through disciplined study can we discover relationships that exist or should exist between current vocational design and older established programs of general studies.

Nowhere in the school system are there so many unsolved issues as in the vocational and technical movement. The Council has unlimited opportunity for service here through applied research and developmental studies.

The costs of such studies are now shareable with the Federal Government under Program X. The financial partnership between Federal and Provincial governments for research and development in this field should facilitate a vigorous program once the organization for carrying it out has been established.

Here are some issues requiring study, evaluation, and development. Priorities among these must be established; furthermore, the scope of problems in technology and education is far from being explored through these suggestions. They do, however, illustrate the kind of problem that should occupy the attention of the Council in this field.

4.1.1 Manpower Studies

Studies in the area of manpower development are central to the effective planning for and the evaluation of technical and vocational programs. The approach in such studies is interdisciplinary involving statisticians, economists and industrial sociologists. The interest in and need for such research transcends local educational planning and interacts with decision making in both industry and government. Nonetheless, trends in the demand of labour, developments in automation and the expansion of industrial frontiers are extremely significant to educational planning.

The Council may undertake directly or commission studies of this type, or it may cooperate with other

agencies in their achievement. The Council should accept, however, a direct responsibility for gathering data, including the results of research, on manpower needs. It should interpret the significance of this information for curriculum design and for the operation of vocational and technical classes.

4.1.2 Curriculum Analysis

Curriculum analysis involves among other things a study of current vocational and technical programs, their effectiveness in preparing students for industrial occupations, and the efficiency with which they achieve their objectives. The following studies are illustrative:

- A study of skills and knowledge required and taught in specific fields such as automotives, or electricity; the extent to which these are generally applicable in other fields; the relationship or overlap of skills in a variety of fields with the object of developing a base or core of knowledge and skills that might have wide application in a range of occupations.
- A reappraisal of the skills and knowledge now being taught in the light of changing industrial requirements. This type of evaluation should be continuous and should involve projections of requirements.
- A reappraisal of emphasis in preparation tends to lessen the danger of teaching obsolescent skills.
- Relationship of technical to general education. The

extent to which preparation for a technological society becomes more and more rooted in general studies; the appropriate placement of general and specific training in public education. Should vocational education remain in the high schools after its initial testing period of from five to ten years?

4.1.3 Counselling and Placement

A continuing study, similar to those already undertaken by the provincial and federal governments, of student preferences and views on vocational choice. What dictates these views and preferences? Where are they shaped? What can the school do to assist students in making intelligent choices? What constitutes an intelligent choice? To answer such questions actions such as these are imperative:

1. Bridges must be built between industry and the school to assist in the development of realistic and useful counselling.
2. The role of the elementary school in its contribution to vocational choice should be explored particularly in the development of attitudes.
3. A careful analysis of the skills, knowledge and special aptitudes, basic to success in broad sectors of business and industry should be undertaken. The student should know the fields in

which he might anticipate success.

4. Placement procedures to either post-high-school institutions or to industry directly should be improved. Pilot studies are indicated here.
5. Follow up studies of graduates should be undertaken. Each school has a responsibility for following the careers of its own graduates. Nonetheless models might be developed through pilot studies undertaken by the Council. Furthermore, the data from the total group of schools offering vocational and technical programs is significant to an understanding of provincial trends.

4.1.4 Studies in Operation

These are similar to projects that might be carried out in a school dedicated largely to general studies. How is staff deployed to the best effect? What could team teaching contribute to this effective deployment? To illustrate: are there ways of utilizing such combinations as electrical, electronics, drafting and machine specialists to build core programs?

A major development study instituted in three or four centres should be carried out in the use of technological devices for instruction. It seems most significant to explore the virtues and defects of the overhead projector, the electronic blackboard, closed-circuit television, electronic teaching machines, computers, to mention only a few..

The central question is now can laboratory work in vocational and technical instruction be improved by this type of hardware? Field studies should emphasize exploration, development, evaluation, and dissemination.

4.1.5 Leisure

Whether we are headed for a leisure oriented society or one demanding a larger and more highly skilled and knowledgeable labour force is not yet clear. It is clear, however, that increasing amounts of leisure time will be available for many people. This constitutes a challenge to public education.

What types of programs will prepare students for effective use of leisure? It is relatively easy to prepare people for a work-oriented society, relatively easy, that is in comparison to the task of preparing graduates to occupy their leisure hours profitably. We need to explore this field in a disciplined manner.

4.2 Buildings and Equipment

One of the largest expenditures of a school system is in the construction and maintenance of its plant. Ideally the plant should provide the best environment for the education of its students. This is true whether the course content is mathematics or automotive mechanics. There is reason to suspect that in addition to the physical plant being utilized for regular school programs, society will require the same facilities for adult education and recreation.

Planning of a school plant requires at least the following steps:

- a) assessing the needs of the instructional staff and the students;
- b) translating these needs into specific architectural designs, and
- c) estimating construction costs for the designs using a particular combination of materials.

Upon completion of the plant the methods and costs involved in adequate maintenance become of central concern. School boards in urban centers, where school constructions costs are very large, have already taken the initiative in recognizing the need for research into plant design and maintenance.

Although it is indeed difficult and often hazardous to estimate trends in educational methodology, there is little doubt that schools will continue to require special facilities for subjects such as chemistry, physics and biological sciences. As far as we know, little effort has been made within this province to assess the effectiveness of various laboratory designs in terms of curricular needs. In fact little attempt is made to prevent the mistakes identified in one school from reappearing in another. Therefore, one function of the Council might be to determine the design of school plants in light of past experience, present needs, and anticipated future developments.

Construction costs can vary extensively as a function of structural design, materials used, time of year a contract is let, and economic conditions existing in a specific locality. It might be reasonable to expect the Council, in consultation with the architectural staffs of urban school systems, to disseminate

to other school systems information concerning costs of various basic structural designs planned to provide essentially the same physical environment.

At present little information is available concerning the lasting qualities of various materials under actual school conditions. For example, little information exists concerning the wearing characteristics of various floor coverings. One school board is at present conducting tests of the durability and maintenance costs of rug coverings. Findings from tests such as these should be available to other school boards. In many instances the Council, rather than embarking upon a specific testing program, might report upon the advantages and disadvantages of using various materials already being used in schools. When the Council became aware of a potentially usable product for school construction, for example an acoustical tile, or a lighting fixture, it might in cooperation with school authorities underwrite the cost of testing such products under actual school conditions. In some instances the Council might use resources of the Alberta Research Council or the University of Alberta.

It would also seem reasonable for the Council to assist school boards in coordinating their plans for construction of new schools in such a manner that basic design units might be used as a means of reducing construction costs while allowing for individual community requirements.

The Council would serve the public well by studying and disseminating information on such problems as:

1. Costs and merits of various basic types of structural design;

2. Comparative costs of school construction and maintenance;
3. Requirements of school plants estimated on the basis of current educational practice;
4. Durability of expendable equipment in the school.

4.3 Studies Related to Resources for Teaching

Quality education can no doubt be improved by spending more money on existing services and by adding new services. But cannot quality also be improved by more efficient use of existing resources? The following are examples which indicate the kinds of studies that might be undertaken to answer this and similar questions.

An early study to be made might involve the best size of groups for efficient teaching and learning. Using carefully selected and controlled situations, specialists could test the effectiveness of various methods of instruction in many subjects to large groups of a hundred or more pupils, to regular class-size groups, to small groups of six or seven, or to individuals. If initial experiments proved promising, more extensive field tryouts in cooperation with individual schools or whole school systems could be made. Finally, if the results continued to show positive results, procedures for demonstration and dissemination of the tested practices could be developed.

Another study might involve the most efficient distribution of professional staff within a school system. Such a study, based as it would be upon existing theory and knowledge, would

provide a guide to the ways in which classroom teachers, administrators, supervisors, non-teaching specialists, and technical and other service personnel might best contribute. It would be possible to experiment with and evaluate a variety of combinations of staff composition.

Another study could relate to efficient use of teaching staff. The value of specialization as a factor of team teaching could be tested as could the presenting of parts of the school program through programmed instruction, thus releasing teacher time for individualized, diagnostic and remedial work. The results of these and similar studies could provide guidelines for other teachers, schools, and school systems.

A third area of investigation could include a set of studies on technological aids to learning. Television, programmed instruction, individualized study devices are examples. Any one of these, offers an extended area for collecting existing knowledge, applying it to the Alberta scene, proposing efficient plans, arranging for experimental tryouts, followed by field tryouts, demonstration, and dissemination.

The above give only a few examples of areas of study and more specific experiments with which the Council would concern itself. It would be expected, of course, to study any educational problem that might reasonably be referred to it for investigation and recommendation. Similarly it might be expected to provide for the development of promising educational changes.

Costs

In the initial year of operation the proposed Council would need a budget of \$200,000 to cover salaries (director, planning committee, service staff), travel, rental of accommodation, and supplies and sundries.

It is anticipated that the budget would increase in the second and succeeding years as activities of the Council grew. We would see costs being estimated as a percentage of the total expenditures on public education. One per cent of those expenditures would seem a not unreasonable basis in so important an enterprise. This suggests that the budget required by the Council would soon have to be considered in terms of a million or more dollars per annum.

AN ACT TO ESTABLISH THE ALBERTA EDUCATIONAL
STUDIES AND DEVELOPMENT COUNCIL

1. In this Act
 - (a) "Board" means The Board of Governors of the Alberta Educational Studies and Development Council;
 - (b) "Council" means The Alberta Educational Studies and Development Council;
 - (c) "Minister" means the Minister of Education.
2. An institution to be known as "The Alberta Educational Studies and Development Council" is hereby established, and the affairs of the Council shall be under the management and control of the Board.
3. The objects of the Council are:
 - (a) To study matters and problems relating to or affecting education;
 - (b) To coordinate the results of studies already completed;
 - (c) To develop, revise, and assess plans, materials and procedures relating to or affecting education;
 - (d) To disseminate the results of and assist in the implementation of the findings of such studies, developments, revisions, and assessments.
4. (i) There shall be a Board of Governors which is hereby constituted a body corporate under the name "The Board of Governors of The Alberta Educational Studies and Development Council."

- (ii) The Board shall be composed of:
 - (a) The Director of the Council,
 - (b) Members appointed by the Lieutenant-Governor-in-Council on recommendation of the Minister and representing the following:
 - (1) Universities of Alberta;
 - (2) Public Junior Colleges;
 - (3) Department of Education;
 - (4) The Alberta Teachers' Association;
 - (5) The Alberta School Trustees' Association;
 - (6) Associations of Superintendents of Schools;
 - (7) The Alberta Federation of Home and School Associations;
 - (8) The General Public.
- (iii) The Lieutenant-Governor-in-Council may make regulations:
 - (a) Fixing the number of members of the Board to be appointed under clause (b) of subsection (ii) and prescribing their terms of office;
 - (b) Prescribing the conditions of service of members of the Board, including rules for eligibility for re-appointment, conditions under which membership is vacated and procedures for filling vacancies.
- (iv) The members of the Board may be paid such amounts for travelling and other expenses incurred in carrying out their duties as the Board, subject to the approval of the Minister, may determine from time to time.

5. The Board may:

- (a) Make such bylaws, rules, and regulations as are deemed expedient for the administration of its affairs, including the fixing of a quorum of the Board;
- (b) Appoint, promote, transfer, or remove such members of the staff of the Council as necessary for the proper conduct of the affairs of the Council and fix their salaries or remuneration and increments and define their duties, qualifications, and tenure of office or employment;
- (c) Appoint a Director and other officers and prescribe their powers and duties and fix salaries or remuneration and determine tenure of office or employment;
- (d) Appoint by resolution a member or members of the Board or any other person or persons to execute on behalf of the Board any documents and other instruments in writing and to affix the corporate seal of the Board thereto;
- (e) Appoint, delegate, or commission any person or persons upon such terms and conditions as may be agreeable to the Board, to perform any or all of the objects of the Council;
- (f) With the approval of the Minister make arrangements for the use by the Council of any publicly supported educational institution for demonstration or experimental purposes or for the services of one or more persons in any such educational institution in the conduct of any demonstration or experiment or other research study; and to enter into agreements with any

association or organization having objects similar to those of the Council, providing for the joint operation of research programs.

(g) Render professional, technical, and financial assistance to institutions or individuals for whom studies have been made by the Board in order that experimental studies and field tryouts may be made and in order that the results of the studies may be disseminated and implemented.

6. The Board each year shall select from among its members a Chairman and such other officers as are necessary for the conduct of its business.
7. The establishment, maintenance, and conduct of the Council shall be provided through monies voted by the Legislature. The Council may accept grants, gifts, and bequests from other sources.
8. The accounts and financial transactions of the Board shall be audited annually by an auditor or auditors appointed by the Board.
9. The Council shall make a report annually to the Minister upon the affairs of the Council, and the Minister shall submit the report to the Lieutenant-Governor-in-Council and shall then lay the report before the Assembly if it is in session or, if not, at the next ensuing session.
10. The real and personal property, business, and income of the Board are not subject to the taxation for provincial or municipal or school purposes.

11. The pension rights and entitlement of staff whether through the Teachers' Retirement Fund Act, the Public Services Pension Act, or other recognized pension provision, shall be protected.
12. This Act may be cited as the Alberta Educational Studies and Development Council Act.

L 41 A333 1965 c.2 MAIN
University of Alberta. Alberta Adv
A proposal for the establishment
of an Alberta Educational Studies

85 293164

L 41 A333 1965 c.2
University of Alberta. Al
A proposal for the establishme
ABEDMAIN



0163300 10595 0

